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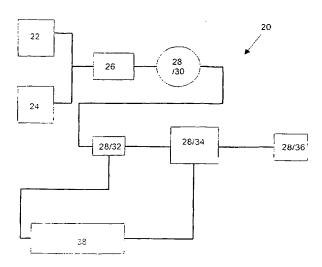
- (71) Applicant (for all designated States except US): ALBERTA RESEARCH COUNCIL INC. [CA/CA]: 250 Karl Clark Road. Edmonton. Alberta T6N 1E4 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): FISHER, Douglas, B. [CA/CA]: 315 Woodhaven Place. S.W., Calgary, Alberta T2W 5P4 (CA). GIRARD, Marcel [CA/CA]: 58 Edgeridge Close, N.W., Calgary, Alberta T3A 6K4 (CA).

HUANG, Haibo [CA/CA]: 111 Morin Maze. Edmonton. Alberta T6K 1V1 (CA).

- (74) Agents: GARWASIUK, Helen et al.: 1501 10060 Jasper Avenue, Scotia Place, Tower Two, Edmonton, Alberta T5J 3R8 (CA).
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[Continued on next page]

(54) Title: A METHOD FOR CHARACTERIZING A DISPERSION USING TRANSFORMATION TECHNIQUES



(57) Abstract: A method for analyzing a dispersion such as an oil/solid suspension or an oil/water emulsion. A set of original domain data is collected relating to an attribute of the dispersion, such as light transmittance therethrough. The set of original domain data is then transformed into a transformed set of original domain data which is in the frequency domain. Any transformation technique, such as a fast Fourier transform, may be used to transform the original domain data from a first domain, such as a time or spatial domain, into the frequency domain. The dispersion is then characterized using the transformed set of original domain data. One or more frequency domain spectra may be generated from the transformed set of original domain data, which frequency domain spectra express a parameter relating to the attribute of the dispersion as a function of frequency, in which case the characterizing step may be performed using the frequency domain spectra.

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